

IN THE DESCRIPTION

Please amend the description. Due to a change of agent since filing and an apparent inconsistency between the Examiner's page references and our file, references to BOTH page number of the application on file as we understand it and the paragraphs [0000] set forth in the published version 2002/0178015 A1 are provided.

Please replace the paragraph at page 2, line 14 [0004] with the following paragraph.

Intellectual property (IP) such as books, journals, magazines and newspapers entail high capital and operating costs for physical preparation and handling. The time lag between investment and sales revenue generation further increases the associated economic risk. Publishers, in most parts, publish only a small portion of works that are judged able to clear high economic hurdle. Even after being published, most written works have a limited shelf life given the high overhead costs. Most are then disposed of through discount and clearance channels. All these factors combine to limit the availability of IP to potential users. The use of the Internet or World Wide Web (IWWW) to retail IP, such as books, journals, magazines, music compact discs (CD) and digital video discs (DVD), greatly increases the accessibility of these forms of IP. However, the problem of costly physical handling remains unsolved.

Please replace the paragraph at page 2, line 26 [0005] with the following paragraph.

The introduction and wide spread use of mainframe computers, and later personal computers, in turn held out the promise of a "paperless society", where most information is stored and retrieved electronically, thereby eliminating the need of paper copies. To date, this promise remains unfulfilled. The reasons are both technical and commercial. Technically, the main hurdles include: inconvenient access to information via machines, the slowness of viewing one page of information at a time on a computer screen, low display resolution, lack of portability and inability to easily annotate the information. Commercially, the higher initial capital and

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operating costs for both content providers and readers or users, and the lack of a definitive legal framework to deal with copyrights of electronic documents have caused only limited use of electronic storage and retrieval of information. This situation, most observable in printed documents, is also true for images and drawings, and to a lesser extent, for sound recordings and movies or videos.

Please replace the paragraph at page 3, line 14 [0008] with the following paragraph.

The rapid and almost unstructured evolution of the I/WWW has brought with it three key difficulties for owners and users of IP. Firstly, the amount of information, presented in the form of web pages identified by ~~an~~ Uniform Resource Locators, (URL), is growing much more rapidly than the ability to search and locate what is of interest to the users. There were reportedly 2.1 billion web pages in July, 2000 and they are estimated to be growing at 7 million pages a day. The use of Search Engines, to continuously comb and index the web pages in existence, and Web Directories to index these web pages, has enhanced the ability of users to find the desired information on the I/WWW. However, even the best of search engines now, such as Googles, are reportedly only able to search through about 15% to 20% of all available web pages in existence. As a result, a large portion of the IP on I/WWW are out of reach for most users. The current technical attempts to solve the problem by using faster computers and more efficient search engine software are unable to keep pace. Secondly, the widespread initial notion, that information available on the I/WWW should be free, has caused severe distorted development of the I/WWW "ecosystem." This low expectation of revenue from I/WWW users has forced web site operators to rely too heavily on advertising revenue. This in turn caused web sites to be designed primarily for channeling user traffic through slow-loading web pages filled with banner or other advertising. This practice greatly slows down how users can find useful information. Thirdly, even when users have found some useful information on web pages, it is difficult to save the information efficiently. Bookmarks can be used to return to specific web pages, but quite often the content is replaced

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by newer material, or the web page is deleted due to web site redesign or business failure.

Please replace the paragraph at page 4, line 17 [0011] with the following 5 paragraphs.

Various existing technologies provide enabling pieces found in the present invention. However, the existing approaches are steeped in the paradigm of physical books and magazines- including the following:

- (1) Physical clipping of news articles as a paid service for clients may use courier delivery of reprints, faxing of clipped information and emailing of documents;
- (2) Many journals such as 'Harvard Business Report' and 'Economists' offer online and offline sale of reprints of articles that appear in the printed publication. They also offer access to their electronic archives although most only cover a small fraction of the rich hardcopy archives;
- (3) Databases such as Nexis-Lexis, Delphion, Dow Jones, infotrieve, ebrary and questia allow paying clients to search its proprietary databases and then order downloads, reprints for physical delivery, by fax or by email. The costs to users are typically high due to the small market that these databases reach;
- (4) Information on web pages can often be copied and then pasted onto a word processing document for storage, which then needs to be filed and indexed for future reference. More commonly, the Uniform Resource Locators (URL's) of the web pages are ~~'bookmarked'~~ 'bookmarked' for later access. However, bookmarking does not allow annotations on the web page and is highly susceptible to 'link rot', where the web page referred to by the bookmark link is no longer available due to deletions, content revisions or business failures;

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Please replace the paragraph at page 5, line 14 [0012] with the following 6 paragraphs.

- (5) a new simplified approach is offered by eGem.com wherein information on the web can be copied into files, with an attached bibliographical reference, and then organized into folders;
- (6) another simplified way is offered by Clickability.com to bookmark web pages organized into folders. These bookmarks and folders can then be shared with others via email, with short attached notes;
- (7) specialized email service is offered by Zaplets.com that allow web pages to be tagged and emailed to other users, so as to start a discussion group on a given subject;
- (8) CueCat.com enables publishers and advertisers to include barcodes on magazines articles and advertisements. Users can buy a bar code reader linked to the personal computer accessing the I/WWW. Scanning a barcode will then automatically link the user's computer to the web site of the publisher or the advertiser;
- (9) Companies like Adobe, Microsoft and Palm currently supply software packages that allow users to annotate (highlight, underline, bookmark, add comments and signatures, etc.) a document, and store the document with or without the annotations and/or store the annotation file separately. Importantly, an annotation file is always defined and linked to a specific document. To use the annotation file, the user must have possession of a copy of that document, to apply the annotation file to. These annotation files are intended to be editing and collaboration tools amongst peers and co-workers. While the specific documents being annotated may typically be protected by DRM methods, no consideration is given to, nor provision made for copyright protection of the annotation files, in the context of their potential

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sale and distribution. Moreover, the annotation files are not intended for linkage to documents that may have only limited rights associated with them, such as view only, etc. No provisions are made to allow linking of these annotation files to keywords, folders or pointers, in order to facilitate future access;

(10) Companies, such as filesanywhere, idrive, xdrive, eBackup;

Please replace the paragraph at page 6, line 1 [0013] with the following 3 paragraphs.

- ~~These companies,~~ provide online storage of files for remote access, typically for a fee. Most offer some free initial storage volume. These are offered typically for private and non-commercial uses and have no provisions for digital rights protection.;

Please replace the paragraph at page 6, line 14 [0014] with the following 2 paragraphs.

- -(11) Some companies have announced plans to offer solutions to store information in a distributed manner on computers of many internet users, to reduce storage costs. and
- (12) New technical development will soon enable ultra high speed optical and wireless access to I/WWW with palm size devices with high resolution and processing power.

Please replace the last 2 paragraphs starting at page 6, line 8 [0015] with the following paragraph.

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~~The functionalities of the above described Most prior arts are summarized in Table 1, and compared art known to those of the present invention. Relevant United States patents are summarized in Table 2. Most Applicant are related to the various methods and systems to index, search, store, retrieve or synchronize documents and files within an enterprise or via the Internet. None of these prior arts and listed patents are related to the essence of the present invention, which provides the assured access to "permanent archives" and the functionality of "Access File", separately, and combined to offer new applications.~~

Please replace the paragraph at page 7, line 1 [0017] with the following paragraph.

In practice, people use IP for either pleasure or reference. Of the two uses, the reference use is typically of much higher economic value to the users. The books and journals that readers keep on the shelf typically contain some pieces of precise information that the user would like to make note of and then store in some manner for easy reference at a later time. These users of reference IP incur the efforts and costs of storage and handling to achieve efficient and assured access to the IP and the ability of users to value add to the IP at a later time. This need for reference and verifiable information is most important and in demand in many professions including legal, medical, academic, political and business. The constantly growing supply of IP also necessitates periodic culling of collections of reference IP owned by individuals, businesses, libraries and governments, leading to ever increasing loss of access to large amounts of IP, most often irreversibly.

Please replace the paragraph at page 7, line 25 [0021] with the following paragraph.

A system of hardware and software including, but not limited to, computer servers, back-up servers, data back-up facilities, and disaster recovery system, banking and payment system, and customer relationship management system is organized to enable archiving, retrieval, indexing and amending of IP. (Figure, 1). IP owners and

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IP users can access this system, called 'Permanent IP Domain' here for identification purpose, via devices including, but not limited to, enterprise mainframe or server, personal computer, personal digital assistant, web TV, WAP enabled ~~cell~~cell phone and dedicated I/WWW access device.

Please replace the paragraph at page 10, line 1 [0033] with the following paragraph.

One key distinguishing and vital feature is the 'permanent nature' of the archive of IP in the Permanent IP Domain. This Permanence is achieved by the establishment of an a small endowment fund, associated with each IP, that will generate a perpetual stream of annuity payments (similar to 'life annuity payments' in life insurance industry or perpetual scholarships enabled by an endowment fund), defined through actuary determination and include allowance for contingencies, that will fund and sustain the physical operations associated with the ongoing archiving of each IP. Specifically, the fee paid by an IP owner to archive a specific IP will be set such that a portion of it can be placed into a separate "pool" of trustee managed "archiving endowment trust" that is designed to generate perpetual annuity payments to pay for future depreciation and operating costs associated with the 'archiving' of that IP. (Figures (Figs. 4 & 5).) The operating costs associated with the retrievals will be separately born by users of the IP and charitable or commercial sponsors.) The separation of the trustee-managers of the "endowment trust" from the operators-managers of the Permanent IP Domain is a key design and operating element that will insulate the archive operation from the economic or policy fluctuations and changes of the commercial operation that may endanger the archiving operation's permanence. This archiving endowment trust may be further augmented, when possible, by donations, grants and allocation of a portion of operating surplus.

Please replace the paragraph at page 12, line 16 [0040] with the following paragraph.

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The present invention methods include the creation of a small and efficient "Access File" enabling users to reference and work with each IP stored. Each Access File contains the unique permanent IP Identification Address (PIPA) for the IP of interest, plus additional information such as user's identity and user-defined key words. It also contains value added information such as annotations, highlights, bookmarks, attachments, etc. applicable to the IP, (which may be a 300-page research report), but is a small and efficient file because it does not have to contain the sizable IP itself. (Figure 6)

Please replace the paragraph at page 13, line 1 [0042] with the following paragraph.

The Access File, whenever opened, will access the specific referenced IP in the Permanent IP Domain and apply all the value-added information to it, before presenting the combined product to the user. This Access File can be added to and modified by another user, and becomes another new Access File with a new Access File Identification Code, and so on. A generation code component will be included in the AFIC to indicate the number of generations of added value that have been added to the Access File.

Please replace the paragraph at page 13, line 7 [0043] with the following paragraph.

Users of the Permanent IP Domain will be able to store the Access Files in folders and link each one to any number of projects, subjects, dates, people etc. to facilitate future access. (Figure(Figs. 7A – 7G)

Please replace the paragraph at page 13, line 14 [0045] with the following paragraph.

Users are able to start an Access File by adding in only partial information such as journal name, issue date, title or other key words, using drop down menus, keying or other methods, on personal computer_(PC), PDA's and other devices, while online or offline. Once the PC, and the PDA directly or via synchronization with the PC, logged onto the Permanent IP Domain, the software will enable users to quickly download the full PIPA associated with the IP and add 'value-add' information such as annotation etc. to the resulting Access File. (Figure-6D)-, 6).

Please replace the paragraph at page 14, line 24 [0051] with the following paragraph.

The creation of this Permanent IP Domain where IP owners voluntarily join as paying members to contribute only IP deemed to be worth paying for, will significantly reduce the amount of information that needs to be searched by the search engines. (Figure, 8)

Please replace the 6 paragraphs at page 16, lines 3 - 14 [0057] – [0063] with the following 7 paragraphs.

Figure 2 is a diagram of an index tag input screen thereof.;

~~Figure 3 is a~~ Figures 3a and 3b are flow diagramdiagrams of an IP owner's submission thereof illustrated on two sheets;

Figures 4 and 5 are diagrams defining an endowment fund element of the invention;

Figures 6 is a diagram of an Access File information thereof.;

Figures ~~-7A to 7C-1, 7A-2~~ are diagrams defining various access methods in use thereof; ~~and, illustrated on two sheets~~;

Figures 7B to 7G are diagrams which more specifically illustrate the five access methods set forth in Figs. 7A-1 and 7A-2; and

Figure 8 is a diagram showing the relationship between the present invention and the -available information on the Internet.

Please replace the paragraph at page 17, line 11 [0067] with the following paragraph.

A Preferred Embodiment-#13:—: Annual and Quarterly Corporate Reports:

Please replace the paragraph at page 17, line 19 [0069] with the following paragraph.

Corporations can keep publishing the Annual and Quarterly Reports, and in addition submit a copy in Adobe PDF, 'MS Reader' or other formats to the Permanent IP Domain for permanent storage. The company will join as an IP owner member, with its unique member id, and pay applicable archiving fee for each IP submitted. Each IP submitted will be properly tagged and assigned a unique permanent IP identification address (PIPA). The company can then use the unique Permanent IP Domain logo and explanatory notes to advise readers of the new added feature. As a service to the investing public, the company may decide to not charge any user fee, and pay the Permanent IP Domain fees to cover the costs associated with access. In return, the company may wish to get traffic reports related to ~~usersa~~ users' access.

Please replace the paragraph at page 18, line 17 [0073] with the following paragraph.

A Preferred Embodiment-#87:—: Web page content

Please replace the paragraph at page 18, line 18 [0074] with the following paragraph.

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Many web pages contain ~~report~~reports or information that is useful for future reference. Users typically 'bookmark' these. Web sites therefore often have to maintain old web pages at the costly servers in order to provide continuous access by users, or replace the pages and render the users' bookmarks useless. Users can also email the report to themselves or cut and paste it to a word processing software for future reference. All of these options are inefficient, may involve copying of very large files to user's computer, and most do not allow annotation on the content.

Please replace the paragraph at page 18, line 25 [0075] with the following paragraph.

A Web page owner, corporate or individual, such as ABC.com or National Post newspaper, can join as member of the Permanent IP Domain and be assigned its unique member id. It will pay a fee to submit the web page content for archiving. It will provide the required 'index tag' information, and specify the various allowable levels access and associated fees within the revenue sharing structure. Upon completion, it will be allowed to use the "Permanent IP Domain's" unique logo to advise its web users of the availability of the new access feature. Software can then be downloaded to add special buttons for easy access from the web page to the Permanent IP Domain and the specific stored IP. The IP owner member will receive payment for his share of the revenue periodically upon reaching some administrative thresholds. It will also receive analysis of the user's traffic if subscribed for.

Please replace the paragraph at page 19, line 17 [0078] with the following paragraph.

A Preferred Embodiment #83: —: Newspaper, Magazine and Journal Articles

Please replace the paragraph at page 20, line 15 [0082] with the following paragraph.

(2)(1) He can note this 'skeleton' key information on a Personal Digital Assistant (PDA) such as a Palm or an iPAQ. (PDA available from Compaq USA). Later, he can use a charging/synchronization cradle or cable to connect the PDA to his PC that is linked to the Internet. After he signs on via his PC to Permanent IP Domain as a member, a software 'plug-in' provided to him in the membership package will automatically synchronize the 'skeleton' Access File information between the PC and the PDA. The software will also used this new 'skeleton' key information to search the -Permanent IP Domain and download the corresponding Permanent IP Addresses (PIPA) to create new Access File's. The user can then review and access these IP and embellish the Access File as appropriate. Upon completing his review, he can synchronize the folders of Access File between his PC and his PDA.

Please replace the paragraph at page 21, line 16 [0087] with the following paragraph.

A Preferred Embodiment #69:_____ : Medical Procedure: taught by prominent surgeon via video

Please replace the paragraph at page 22, line 1 [0089] with the following paragraph.

The present invention is a technical and commercial method of managing information comprising the steps_of: providing an information archiving, retrieval, indexing and amending system containing plural intellectual property included for a fee; enabling access to the information storage and retrieval system by users through an electronic communications network for a fee; grading and indexing the submitted intellectual property; grading the users according to access privilege; creating and associating an Access File for each user; searching the system for intellectual property meeting said user's criteria; associating each Access File with selected intellectual property; amending the said intellectual property with said Access File; storing said Access File separate from the intellectual property; and indexing the said Access File by a set of user defined keywords, linkages and

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attributes; whereby the said Access File and the said intellectual property may be located more easily.

Please replace the paragraph at page 22, line 14 [0090] with the following paragraph.

Preferably, the system ~~providing step~~ comprises interconnecting for operation: a main server, a mirror server, an operational backup system, a disaster recovery system, connection to the Internet and thereby to at least one of: main frame computers, personal computers, personal digital assistants, web TV sets, WAP cell phones, and dedicated Internet connections.

Please replace the paragraph at page 22, line 19 [0091] with the following paragraph.

Preferably, the intellectual property indexing step comprises assembling information taken from the aspects list of: intellectual property type, country of publication, author name, assignee, revenue sharing ratio, bank account, keywords, abstract, excerpts, ISBN number, ISSN number, publication date, volume number, issue number, page number, file format, file size, language rating, and violence rating- (Figure (Fig. 3)).

Please replace the paragraph at page 23, line 6 [0093] with the following paragraph.

Preferably, the access level selecting step includes at least one of the further steps of: determining if user is a member, signing user as member, accepting agreement, paying membership fee, downloading access software, receiving open credit balance, reviewing fee schedule, selecting level of access, and paying further search and retrieval fees. (Figure, 6G)